The following <u>Listing of the Claims</u> will replace all prior versions and all prior listings of the Claims in the present application:

## Listing of The Claims:

- 1. (Currently Amended): An isolated <u>Tumstatin</u> fragment <u>comprising amino acid residues</u>

  77-95 of SEQ ID NO:10, <u>and</u> having the ability to inhibit tumor growth.
- 2. (Currently Amended): An [The] isolated polypeptide having the amino acid sequence of [fragment of Claim 1, wherein the fragment is] SEQ ID NO:37.
- 3. (Original) The isolated fragment of Claim 1, wherein the fragment is reduced.
- 4. (Original) The isolated fragment of Claim 1, wherein the fragment is alkylated.
- 5. (Original) The isolated fragment of Claim 1, wherein the fragment is oxidized.
- 6. (Currently Amended) An isolated mutated fragment comprising amino acid residues 77-95 of SEQ ID NO:10, wherein one or more, and five or fewer, amino acids have been substituted, and wherein the mutated fragment has the ability to inhibit tumor growth.
- 7. (Original) The isolated mutated fragment of Claim 6, wherein the fragment is reduced.
- 8. (Original) The isolated mutated fragment of Claim 6, wherein the fragment is alkylated.
- 9. (Original) The isolated mutated fragment of Claim 6, wherein the fragment is oxidized.
- 10. (Currently Amended) The isolated fragment of Claim 1 [6], wherein the fragment is SEQ ID NO:38.
- 11. (Currently Amended) The isolated fragment of Claim 1 [6], wherein the fragment is SEQ ID NO:39.
- 12. (Currently Amended) The isolated fragment of Claim <u>1</u> [6], wherein the fragment is SEQ ID NO:40.

13. (Currently Amended) The isolated fragment of Claim <u>1</u> [6], wherein the fragment is SEQ ID NO:41.

- 14. (Currently Amended) The isolated fragment of Claim 1 [6], wherein the fragment is SEQ ID NO:42.
- 15. (Currently Amended) An isolated <u>Turnstatin</u> fragment <u>comprising amino acid residues</u>

  77-95 fragment of SEQ ID NO:10, <u>and</u> having the ability to inhibit angiogenesis.
- 16. (Original) The isolated fragment of Claim 15, wherein the fragment is SEQ ID NO:37.
- 17. (Original) The isolated fragment of Claim 15, wherein the fragment is reduced.
- 18. (Original) The isolated fragment of Claim 15, wherein the fragment is alkylated.
- 19. (Original) The isolated fragment of Claim 15, wherein the fragment is oxidized.
- 20. (Currently Amended) An isolated mutated fragment comprising amino acid residues 77-95 of SEQ ID NO:10, wherein one or more, and five or fewer, amino acids have been substituted, and wherein the mutated fragment has the ability to inhibit angiogenic activity.
- 21. (Original) The isolated mutated fragment of Claim 20, wherein the fragment is reduced.
- 22. (Original) The isolated mutated fragment of Claim 20, wherein the fragment is alkylated.
- 23. (Original) The isolated mutated fragment of Claim 20, wherein the fragment is oxidized.
- 24. (Original) The isolated fragment of Claim 20, wherein the fragment is SEQ ID NO:38.
- 25. (Original) The isolated fragment of Claim 20, wherein the fragment is SEQ ID NO:39.
- 26. (Original) The isolated fragment of Claim 20, wherein the fragment is SEO ID NO:40.
- 27. (Original) The isolated fragment of Claim 20, wherein the fragment is SEQ ID NO:41.
- 28. (Original) The isolated fragment of Claim 20, wherein the fragment is SEO ID NO:42.

- 29. (Currently Amended): An isolated <u>Turnstatin</u> fragment <u>comprising amino acid residues</u>

  77-95 of SEQ ID NO:10, <u>and</u> having the ability to inhibit protein synthesis in endothelial cells.
- 30. (Original) The isolated fragment of Claim 29, wherein the fragment is SEQ ID NO:37.
- 31. (Original) The isolated fragment of Claim 29, wherein the fragment is reduced.
- 32. (Original) The isolated fragment of Claim 29, wherein the fragment is alkylated.
- 33. (Original) The isolated fragment of Claim 29, wherein the fragment is oxidized.
- 34. (Currently Amended) An isolated mutated fragment comprising amino acid residues 77-95 of SEQ ID NO:10, wherein one or more, and five or fewer, amino acids have been substituted, and wherein the mutated fragment has the ability to inhibit protein synthesis in endothelial cells.
- 35. (Original) The isolated mutated fragment of Claim 34, wherein the fragment is reduced.
- 36. (Original) The isolated mutated fragment of Claim 34, wherein the fragment is alkylated.
- 37. (Original) The isolated mutated fragment of Claim 34, wherein the fragment is oxidized.
- 38. (Original) The isolated fragment of Claim 34, wherein the fragment is SEQ ID NO:38.
- 39. (Original) The isolated fragment of Claim 34, wherein the fragment is SEQ ID NO:39.
- 40. (Original) The isolated fragment of Claim 34, wherein the fragment is SEQ ID NO:40.
- 41. (Original) The isolated fragment of Claim 34, wherein the fragment is SEQ ID NO:41.
- 42. (Original) The isolated fragment of Claim 34, wherein the fragment is SEQ ID NO:42.
- 43. (Withdrawn) A method for inhibiting tumor growth in mammalian tissue, the method comprising contacting the tissue with a composition comprising an isolated fragment selected from the group consisting of: (a) SEQ ID NO:10; (b) amino acid 2 through amino acid 245 of SEQ ID NO:10; (c) SEQ ID NO:19; (d) amino acid 1 through amino

acid 125 of SEQ ID NO:10; (e) SEQ ID NO:20; (f) SEQ ID NO:21; (g) SEQ ID NO:22; (h) SEQ ID NO:23; (i) SEQ ID NO:25; (j) SEQ ID NO:26; (k) SEQ ID NO:29; (l) SEQ ID NO:30; (m) SEQ ID NO:33; (n) SEQ ID NO:34; (o) SEQ ID NO:37; (p) SEQ ID NO:38; (q) SEQ ID NO:39; (r) SEQ ID NO:40; (s) SEQ ID NO:41; and (t) SEQ ID NO:42.

- 44. (Withdrawn) The method of Claim 43, wherein the fragment is reduced.
- 45. (Withdrawn) The method of Claim 43, wherein the fragment is alkylated.
- 46. (Withdrawn) The method of Claim 43, wherein the fragment is oxidized.
- 47. (Withdrawn) The method of Claim 43, wherein one or more of the cysteine residues have been substituted for another amino acid.
- 48. (Withdrawn) A method for inhibiting angiogenic activity in mammalian tissue, the method comprising contacting the tissue with a composition comprising an isolated fragment selected from the group consisting of: (a) SEQ ID NO:10; (b) amino acid 2 through amino acid 245 of SEQ ID NO:10; (c) SEQ ID NO:19; (d) amino acid 1 through amino acid 125 of SEQ ID NO:10; (e) SEQ ID NO:20; (f) SEQ ID NO:21; (g) SEQ ID NO:22; (h) SEQ ID NO:23; (i) SEQ ID NO:25; (j) SEQ ID NO:26; (k) SEQ ID NO:29; (l) SEQ ID NO:30; (m) SEQ ID NO:33; (n) SEQ ID NO:34; (o) SEQ ID NO:37; (p) SEQ ID NO:38; (q) SEQ ID NO:39; (r) SEQ ID NO:40; (s) SEQ ID NO:41; and (t) SEQ ID NO:42.
- 49. (Withdrawn) A method for inhibiting protein synthesis in one or more mammalian cells, the method comprising contacting the one or more cells with a composition comprising an isolated fragment selected from the group consisting of: (a) SEQ ID NO:10; (b) amino acid 2 through amino acid 245 of SEQ ID NO:10; (c) SEQ ID NO:19; (d) amino acid 1 through amino acid 125 of SEQ ID NO:10; (e) SEQ ID NO:20; (f) SEQ ID NO:21; (g) SEQ ID NO:22; (h) SEQ ID NO:23; (i) SEQ ID NO:25; (j) SEQ ID NO:26; (k) SEQ ID NO:29; (l) SEQ ID NO:30; (m) SEQ ID NO:33; (n) SEQ ID NO:34; (o) SEQ ID NO:37; (p) SEQ ID NO:38; (q) SEQ ID NO:39; (r) SEQ ID NO:40; (s) SEQ ID NO:41; and (t) SEQ ID NO:42.

50. (Withdrawn) A method for inhibiting protein synthesis in one or more mammalian cells, the method comprising contacting the one or more cells with a composition comprising an isolated fragment selected from the group consisting of: (a) SEQ ID NO:2; (b) SEQ ID NO:6; and (c) SEQ ID NO:10.

- 51. (Original) The isolated fragment of Claim 29, wherein the protein synthesis is capdependent protein synthesis.
- 52. (Withdrawn) The method of Claim 49, wherein the protein synthesis is cap-dependent protein synthesis.
- 53. (Withdrawn) The method of Claim 50, wherein the protein synthesis is cap-dependent protein synthesis.
- 54. (Original) The isolated fragment of Claim 29, wherein the endothelial cells express the  $\alpha_{\upsilon}\beta_{3}$  integrin.
- 55. (Withdrawn) The method of Claim 49, wherein the mammalian cells express the  $\alpha_{\nu}\beta_{3}$  integrin.
- 56. (Withdrawn) The method of Claim 50, wherein the mammalian cells express the  $\alpha_{\nu}\beta_{3}$  integrin.
- 57. (Withdrawn) An isolated peptide of the formula: R<sup>1</sup>X<sup>1</sup>LFX<sup>2</sup>NVNX<sup>3</sup>V- X<sup>4</sup>NFR<sup>2</sup> (SEQ ID NO:45), wherein R<sup>1</sup> is hydrogen or a peptidyl chain of 1 to 17 amino acids, R<sup>2</sup> is hydrogen or a peptidyl chain of 1 to 12 amino acids, and X<sup>1</sup>, X<sup>2</sup> and X<sup>3</sup> are individually an amino acid, and wherein said peptide inhibits tumor growth.
- 58. (Withdrawn) The isolated peptide of Claim 57, wherein X<sup>1</sup> is an amino acid with a basic side chain or an amino acid with an aromatic side chain.
- 59. (Withdrawn) The isolated peptide of Claim 58, wherein X<sup>1</sup> is phenylalanaine, tyrosine, tryptophan, lysine, arginine, histidine, glutamine or asparagine.
- 60. (Withdrawn) The isolated peptide of Claim 59, wherein X<sup>1</sup> is lysine or phenylalanine.

61. (Withdrawn) The isolated peptide of Claim 57, wherein  $X^2$ ,  $X^3$  and  $X^4$  are independently an amino acid with a hydrophilic side chain or an amino acid with a basic side chain.

- 62. (Withdrawn) The isolated peptide of Claim 61, wherein  $X^2$ ,  $X^3$  and  $X^4$  are independently cysteine, serine, threonine, aspartic acid or glutamine.
- 63. (Withdrawn) The isolated peptide of Claim 62, wherein  $X^2$  and  $X^4$  are independently cysteine, serine or aspartic acid and  $X^3$  is cysteine or aspartic acid.
- 64. (Withdrawn) The isolated peptide of Claim 57, wherein  $X^1$  is phenylalanine, tyrosine, tryptophan, lysine, arginine, histidine, glutamine or asparagine and  $X^2$ ,  $X^3$  and  $X^4$  are independently cysteine, serine, threonine, aspartic acid or glutamine.
- 65. (Withdrawn) The isolated peptide of Claim 57, wherein R<sup>1</sup> is one amino acid or a peptidyl chain of 2, 3, 4, 5, 6, 7, or 8 amino acid residues.
- (Withdrawn) The isolated peptide of Claim 65, wherein said amino acid or peptidyl chain represented by R¹ is selected from the group consisting of: (a) P; (b) MP; (c) TMP;
  (d) TTMP (SEQ ID NO:46); (e) FTTMP (SEQ ID NO:47); (f) RFTTMP (SEQ ID NO:48); (g) QRFTTMP (SEQ ID NO:49); (h) LQRFTTMP (SEQ ID NO:50); (i) KQRFTTMP (SEQ ID NO:51); and (j) a conservative variant of any of (a)-(i).
- 67. (Withdrawn) The isolated peptide of Claim 57, wherein R<sup>2</sup> is one amino acid or a peptidyl chain of 2, 3, 4, 5, 6, 7, 8 or 9 amino acid residues.
- 68. (Withdrawn) The isolated peptide of Claim 67, wherein said amino acid or peptidyl chain represented by R<sup>2</sup> is selected from the group consisting of: (a) A; (b) AS; (c) ASR; (d) ASRN (SEQ ID NO:52); (e) ASRND (SEQ ID NO:53); (f) ASRNDY (SEQ ID NO:54); (g) ASRNDYS (SEQ ID NO:55); (h) ASRNDYSY (SEQ ID NO:56); (i) ASRNDYSYW (SEQ ID NO:57); (j) ASRNDYSYWL (SEQ ID NO:58); and (k) a conservative variant of any of (a)-(j).
- 69. (Withdrawn) The isolated peptide of Claim 57, wherein the peptide is reduced.
- 70. (Withdrawn) The isolated peptide of Claim 57, wherein the peptide is alkylated.

71. (Withdrawn) The isolated peptide of Claim 57, wherein the peptide is oxidized.

- 72. (Withdrawn) An isolated peptide of the formula: R<sup>1</sup>X<sup>1</sup>LFX<sup>2</sup>NVNX<sup>3</sup>V- XNFR<sup>2</sup> (SEQ ID NO:45), wherein R1 is hydrogen or a peptidyl chain of 1 to 17 amino acids, R<sup>2</sup> is hydrogen or a peptidyl chain of 1 to 12 amino acids, and X<sup>1</sup>, X<sup>2</sup> and X<sup>3</sup> are individually an amino acid, and wherein said peptide inhibits angiogenic activity in mammalian tissue.
- 73. (Withdrawn) The isolated peptide of Claim 72, wherein X<sup>1</sup> is an amino acid with a basic side chain or an amino acid with an aromatic side chain.
- 74. (Withdrawn) The isolated peptide of Claim 73, wherein X<sup>1</sup> is phenylalanaine, tyrosine, tryptophan, lysine, arginine, histidine, glutamine or asparagine.
- 75. (Withdrawn) The isolated peptide of Claim 74, wherein  $X^1$  is lysine or phenylalanine.
- 76. (Withdrawn) The isolated peptide of Claim 72, wherein  $X^2$ ,  $X^3$  and  $X^4$  are independently an amino acid with a hydrophilic side chain or an amino acid with a basic side chain.
- 77. (Withdrawn) The isolated peptide of Claim 76, wherein  $X^2$ ,  $X^3$  and  $X^4$  are independently cysteine, serine, threonine, aspartic acid or glutamine.
- 78. (Withdrawn) The isolated peptide of Claim 77, wherein  $X^2$  and  $X^4$  are independently cysteine, serine or aspartic acid and  $X^3$  is cysteine or aspartic acid.
- 79. (Withdrawn) The isolated peptide of Claim 72, wherein  $X^1$  is phenylalanine, tyrosine, tryptophan, lysine, arginine, histidine, glutamine or asparagine and  $X^2$ ,  $X^3$  and  $X^4$  are independently cysteine, serine, threonine, aspartic acid or glutamine.
- 80. (Withdrawn) The isolated peptide of Claim 72, wherein R<sup>1</sup> is one amino acid or a peptidyl chain of 2, 3, 4, 5, 6, 7, or 8 amino acid residues.
- (Withdrawn) The isolated peptide of Claim 80, wherein said amino acid or peptidyl chain represented by R<sup>1</sup> is selected from the group consisting of: (a) P; (b) MP; (c) TMP;
  (d) TTMP (SEQ ID NO:46); (e) FTTMP (SEQ ID NO:47); (f) RFTTMP (SEQ ID

- NO:48); (g) QRFTTMP (SEQ ID NO:49); (h) LQRFTTMP (SEQ ID NO:50); (i) KQRFTTMP (SEQ ID NO:51); and (j) conservative variant of any of (a)-(i).
- 82. (Withdrawn) The isolated peptide of Claim 72, wherein R is one amino acid or a peptidyl chain of 2, 3, 4, 5, 6, 7, 8 or 9 amino acid residues.
- 83. (Withdrawn) The isolated peptide of Claim 82, wherein said amino acid or peptidyl chain represented by R<sup>2</sup> is selected from the group consisting of: (a) A; (b) AS; (c) ASR; (d) ASRN (SEQ ID NO:52); (e) ASRND (SEQ ID NO:53); (f) ASRNDY (SEQ ID NO:54); (g) ASRNDYS (SEQ ID NO:55); (h) ASRNDYSY (SEQ ID NO:56); (i) ASRNDYSYW (SEQ ID NO:57); (j) ASRNDYSYWL (SEQ ID NO:58); and (k) a conservative variant of any of (a)-(j).
- 84. (Withdrawn) The isolated peptide of Claim 72, wherein the peptide is reduced.
- 85. (Withdrawn) The isolated peptide of Claim 72, wherein the peptide is alkylated.
- 86. (Withdrawn) The isolated peptide of Claim 72, wherein the peptide is oxidized.
- 87. (Withdrawn) An isolated peptide of the formula: R<sup>1</sup>X<sup>1</sup>LFX<sup>2</sup>NVNX<sup>3</sup>V- X<sup>4</sup>NFR<sup>2</sup> (SEQ ID NO:45), wherein R<sup>1</sup> is hydrogen or a peptidyl chain of 1 to 17 amino acids, R<sup>2</sup> is hydrogen or a peptidyl chain of 1 to 12 amino acids, and X<sup>1</sup>, X<sup>2</sup> and X<sup>3</sup> are individually an amino acid, and wherein said peptide inhibits protein synthesis in endothelial cells.
- 88. (Withdrawn) The isolated peptide of Claim 87, wherein X<sup>1</sup> is an amino acid with a basic side chain or an amino acid with an aromatic side chain.
- 89. (Withdrawn) The isolated peptide of Claim 88, wherein X<sup>1</sup> is phenylalanaine, tyrosine, tryptophan, lysine, arginine, histidine, glutamine or asparagine.
- 90. (Withdrawn) The isolated peptide of Claim 89, wherein X<sup>1</sup> is lysine or phenylalanine.
- 91. (Withdrawn) The isolated peptide of Claim 87, wherein  $X^2$ ,  $X^3$  and  $X^4$  are independently an amino acid with a hydrophilic side chain or an amino acid with a basic side chain.

92. (Withdrawn) The isolated peptide of Claim 91, wherein X<sup>2</sup>, X<sup>3</sup> and X<sup>4</sup>4 are independently cysteine, serine, threonine, aspartic acid or glutamine.

- 93. (Withdrawn) The isolated peptide of Claim 92, wherein  $X^2$  and  $X^4$  are independently cysteine, serine or aspartic acid and  $X^3$  is cysteine or aspartic acid.
- 94. (Withdrawn) The isolated peptide of Claim 87, wherein X<sup>1</sup> is phenylalanine, tyrosine, tryptophan, lysine, arginine, histidine, glutamine or asparagine and X<sup>2</sup>, X<sup>3</sup> and X<sup>4</sup> are independently cysteine, serine, threonine, aspartic acid or glutamine.
- 95. (Withdrawn) The isolated peptide of Claim 87, wherein R.sup.1 is one amino acid or a peptidyl chain of 2, 3, 4, 5, 6, 7, or 8 amino acid residues.
- 96. (Withdrawn) The isolated peptide of Claim 95, wherein said amino acid or peptidyl chain represented by R<sup>1</sup> is selected from the group consisting of: (a) P; (b) MP; (c) TMP; (d) TTMP (SEQ ID NO:46); (e) FTTMP (SEQ ID NO:47); (f) RFTTMP (SEQ ID NO:48); (g) QRFTTMP (SEQ ID NO:49); (h) LQRFTTMP (SEQ ID NO:50); (i) KQRFTTMP (SEQ ID NO:51); and (j) a conservative variant of any of (a)-(i).
- 97. (Withdrawn) The isolated peptide of Claim 87, wherein R<sup>2</sup> is one amino acid or a peptidyl chain of 2, 3, 4, 5, 6, 7, 8 or 9 amino acid residues.
- 98. (Withdrawn) The isolated peptide of Claim 97, wherein said amino acid or peptidyl chain represented by R<sup>2</sup> is selected from the group consisting of: (a) A; (b) AS; (c) ASR; (d) ASRN (SEQ ID NO:52); (e) ASRND (SEQ ID NO:53); (f) ASRNDY (SEQ ID NO:54); (g) ASRNDYS (SEQ ID NO:55); (h) ASRNDYSY (SEQ ID NO:56); (i) ASRNDYSYW (SEQ ID NO:57); (j) ASRNDYSYWL (SEQ ID NO:58); and (k) a conservative variant of any of (a)-(j).
- 99. (Withdrawn) The isolated peptide of Claim 87, wherein the peptide is reduced.
- 100. (Withdrawn) The isolated peptide of Claim 87, wherein the peptide is alkylated.
- 101. (Withdrawn) The isolated peptide of Claim 87, wherein the peptide is oxidized.

102. (Withdrawn) A method for inhibiting tumor growth in mammalian tissue, the method comprising contacting the tissue with a composition comprising the isolated peptide of Claim 57.

- 103. (Withdrawn) A method for inhibiting angiogenic activity in mammalian tissue, the method comprising contacting the tissue with a composition comprising the isolated peptide of Claim 72.
- 104. (Withdrawn) A method for inhibiting protein synthesis in one or more mammalian cells, the method comprising contacting the one or more cells with a composition comprising the isolated peptide of Claim 87.
- 105. (Withdrawn) The isolated peptide of Claim 57, combined with a pharmaceutically-acceptable carrier.
- 106. (Withdrawn) The isolated peptide of Claim 72, combined with a pharmaceutically-acceptable carrier.
- 107. (Withdrawn) The isolated peptide of Claim 87, combined with a pharmaceutically-acceptable carrier.